Wheat
Good for Life

July 23, 1985

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Fifty-Five Dollars Per Year

Bakers welcome most tax reform steps

WASHINGTON, July 22. — Baker and allied members of American Bakers Association appear to be willing to give up existing tax benefits, including the investment tax credit and the accelerated cost recovery system, in exchange for an overall reduction in corporate tax rates. That is the principal conclusion from a survey of A.B.A. members on President Reagan's tax reform proposals.

Commenting on the finding in the survey by the Washington accounting firm of Bond, Beebe, Barton & Muckelbauer that members are not in agreement on many provisions in the tax reform package, Robert J. Wager, A.B.A. president, said:

"Our industry is in microcosm what the nation as a whole expresses about tax reform. We all want tax cuts but we're not agreed on how to go about it."

The survey results, Mr. Wager said, will be reviewed at a Sept. 10-11 meeting of A.B.A.'s Executive Committee and board of directors to help formulate the organization's position on tax reform. "Tax reform

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COMMENT

The focus is on fiber

"Fiber has become the number one hot topic in food and nutrition today," said a speaker at a recent meeting sponsored by the Institute of Food Technologists's Nutrition Division and the Wheat Industry Council. Certainly fiber received major attention at I.F.T.'s annual meeting, coverage of which continues in this week's issue of *Milling & Baking News*. The proceedings and exposition suggested unlimited potential for development of new high-fiber cereals, baked foods and snacks.

While there have been indications that consumer concern about food product health and nutrition benefits has peaked, or at t is being satisfied by present product offerings, new circumstan e again placed diet and health at the front of the public co ess. In covering President Reagan's unfortunate illness, virtual e major news media gave new attention to long-established sc findings and guidelines about the relationship of diet and cancer.

This new focus on fiber undoubtedly will leave impressions among consumers about its importance. As this translates into increased demand for healthful, high-fiber foods, breadstuffs is in a favored position to meet those needs with present and future products.

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General Mills realigns.... 10

Final elements of corporate restructuring at General Mills, most significant since sale of flour mills in 1960's, includes divestiture of operations accounting for more than 25% of sales and assets. Loss for fiscal 1985, first in company's history, reflects charges for redeployments and dispositions.

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In posting sharp turnaround in earnings from continuing operations, Interstate Bakeries has best year since fiscal 1982; Robert W. Hatch sees continued growth in both bread and cake product lines.

Italgrani mill project..... 9

Ground-breaking ceremonies mark construction start of $10 million durum mill at St. Louis by Italgrani USA Inc., company's second in U.S. Mill to have daily milling capacity of 6,800 cwts.

New futures lows..... 15

Continuing long-term trend, wheat futures in Kansas City and Chicago slip to lowest levels in seven years. K.C. contracts decline 5@13½c and Chicago prices topple 7¼@13¼c, with Minneapolis off 4¾@12c. Nearby Chicago July dips below $3 just ahead of expiration.

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Weekly Journal for Breadstuffs Managers

MILLING CENSUS REPORT

Milling & Baking News

FLOUR SERVICE
PENNWALT
CHEMICALS • EQUIPMENT
HEALTH PRODUCTS

Milling growth slows but shipments to new high

A MODERATION IN GROWTH OF VALUE of shipments and value added by manufacture is noted in the final 1982 Census of Manufactures report for the Flour and Other Grain Mill Products Industry (Standard Industrial Classification 2041). At the same time, poundage shipments of wheat flour reached record levels in 1982, and the final report suggests increased stability in the industry with the pace of the downward trend in number of plants unchanged from the previous five-year Census period. The number of plants with 20 or more employes actually increased.

Value of shipments in the Blended and Prepared Flour Industry, S.I.C. 2045, in 1982 was up 40% from 1977, compared with a 44% gain in the previous Census period, and value added in 1982 jumped 49%, well above a 33% gain noted in the 1972-77 period.

(The Flour and Other Grain Mill Products Industry comprises establishments primarily engaged in milling flour or meal from wheat, corn and other grain, except rice. Principal products include wheat flour, prepared mixes and doughs, and corn flour and other corn mill products. The Blended and Prepared Flour Industry is made up of establishments primarily manufacturing prepared flour mixes or doughs from purchased ingredients.)

Value of shipments by plants in the Flour and Other Grain Mill Products Industry in 1982 was up 34% from 1977, while value added by manufacture was up 33%. That compares with gains of 55% and 62%, respectively, noted in the 1977 Census. Value added is considered by the Bureau of the Census to be the best value measure available for comparing industry data from census to census. The 1982 figure is not fully comparable to prior-year data because of changes in instructions for reporting inventories, the Census report shows that on a basis comparable to historical data, value added in 1982 was $1,093.8 million.

The Blended and Prepared Flour Industry, according to the final Census report, had value added of $609.2 million in 1982, up 49% from $408.7 million in 1977. On a basis comparable to historical data, value added in 1982 was $609.6 million. In the 1977 Census, value added in S.I.C. 2045 was up 33% from the previous Census in 1972.

Total value of shipments for establishments classified in the Flour and

New York takes lead .. Page 4-A.
Record in wheat flour Page 4-A.
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Other Grain Mill Products Industry totaled $4,932.8 million in 1982, up 34% from $3,683.3 million in 1977. That gain compares with a 55% rise in the 1977 Census and a drop of 3% in value of shipments in the 1972 Census. The value of shipment and value added figures are at prices current for the Census year specified and are not adjusted for inflation.

The final Census report shows that 97% of the value of shipments by the Flour and Other Grain Mill Products Industry in 1982 were of products classified as primary to the industry. This specialization ratio is down slightly from 98% in 1977 but is the same as in 1972 and compares with 93% in 1967.

Of total shipments by establishments 71% in 1977 and compared with 74% in 1972 and 78% in 1967. In the Blended and Prepared Flour Industry, the coverage ratio in 1982 was 58%, compared with 60% in 1977, 65% in 1972 and 63% in 1967.

These low coverage ratios largely reflect the fact that blended and prepared flour are considered primary products in both industries. The final Census report commented as follows on the ratios:

"For 1982, [Flour and Other Grain Mill Products Industry] shipment figures include $1,691.4 million of blended and prepared flour made from purchased flour (primary products of industry 2045). The shipment figures for 1977 and 1972 include $1,204.3 million and $652.6 million, respectively. If confined exclusively to industry 2041, the coverage ratio for 1982, 1977 and 1972 would have been 94, 94 and 95, respectively.

"For 1982 [Blended and Prepared Flour Industry] shipment figures include $382.1 million of blended and prepared flour made in flour mills (primary products of industry 2041). The shipment figures for 1977 and 1972 incude $287.2 million and $143.5 million, respectively. If confined exclusively to industry 2045, the coverage ratios for 1982, 1977 and 1972 would have been 71, 75 and 79, respectively."

Value of shipments by establishments classified in the Blended and Prepared Flour Industry totaled $1,419.1 million in 1982, up from $1,011.7 million in 1977. That 40% gain in 1982 value of shipments compares with a 44% rise in value of shipments in 1977.

The final Census report shows that 1977 and $3,026.7 million in 1972. In S.I.C. 2045, shipments by all producers in 1982 were valued at $2,073.9 million, against $1,491.5 million in 1977 and $796.1 million in 1972.

The Census report shows the Prepared Feeds Industry, Not Elsewhere Classified, S.I.C. 2048, had wheat flour shipments valued at $50.2 million in 1982 and corn mill product shipments valued at $12.5 million. Establishments classified in other industries, it is noted, were responsible for value of shipments of $89.1 million. While the Census does not provide exact shipment figures for these other industries, it notes that three had shipments of more than $5 million — Soybean Oil Mills; Distilled Liquor, Except Brandy; and Flavoring, Extracts and Syrups, Not Elsewhere Classified.

Food Preparations, N.E.C., S.I.C. 2099, shipped $53.8 million of blended and prepared flour products in 1982, according to the final Census report. Other industries with shipments of more than $5 million were Canned Specialties; Shortening and Cooking Oils, and Bread, Cake and Related Products.

Secondary products shipped by establishments in the Flour and Other Grain Mill Products Industry in 1982 included $23.1 million in products primary to Wet Corn Milling, $46.6 million in Prepared Feeds, and $10.6 million in Food Preparations, N.E.C.

Secondary product shipments by establishments in the Blended and Prepared Flour Industry in 1982 included $1.6 million in Canned Fruits and Vegetables and $39.7 million in Food Preparations, N.E.C.

paring relative economic importance of manufacturing among industries and geographic areas. According to the Bureau of the Census, value added is derived "by subtracting the cost of materials, supplies, containers, fuel, purchased electricity and contract work from the value of shipments. The result of this calculation is adjusted by the addition of value added by merchandising operations plus the net change in finished goods and work-in-process between the beginning and end-of-year inventories."

Value added by the Flour and Other Grain Mill Products Industry in 1982 was $1,094.3 million, compared with $824.5 million in 1977. Noting that the in the Flour and Other Grain Mill Products Industry, $4,590.1 million was in primary products, $124.8 million was in secondary products, and $217.9 million was in miscellaneous receipts. Comparable totals for 1977 were $3,461.0 million, $81.1 million and $141.2 million.

"Coverage ratios" in the Flour and Other Grain Mill Products Industry and the Blended and Prepared Flour Industry continued to decline in the 1977-82 period. The coverage ratio is the ratio of primary products shipped by establishments in the industry to the total shipments of such products by all manufacturers wherever classified. This ratio in the Flour and Other Grain Mill Products Industry in 1982 was 70%, down from 93% of the value of shipments by establishments in the Blended and Prepared Flour Industry in 1982 were of products classified as primary to the industry. This specialization ratio compares with 94% in 1977 and only 77% in 1972.

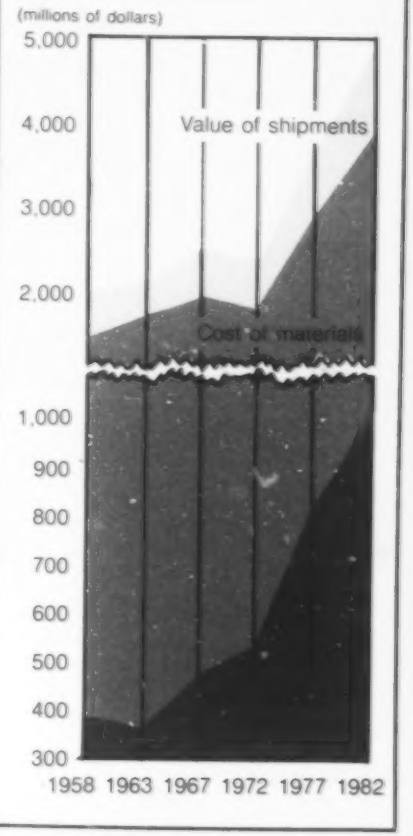
Of total shipments by establishments in the Blended and Prepared Flour Industry, $1,208.8 million was in primary products, $94 million was in secondary products, and $116.1 million was in miscellaneous receipts. Comparable totals for 1977 were $897.8 million, $53.5 million and $60.4 million.

Value of shipments in 1982 of products classified as primary to S.I.C. 2041 by all manufacturers was $6,563 million, compared with $4,882.9 million in

Key operating ratios for milling

Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
INDUSTRY 2041, FLOUR AND OTHER GRAIN MILL PRODUCTS									
1982 Census	21 391	75	2 123	9.64	78	84	72 470	30	45.22
1981 ASM	19 346	73	2 250	8.22	79	85	70 487	27	42.67
1980 ASM	17 571	73	2 265	7.64	79	85	66 477	27	40.25
1979 ASM	16 809	73	2 250	7.19	78	84	61 601	27	37.40
1978 ASM	16 000	74	2 198	6.91	78	84	55 980	29	34.64
1977 Census	14 250	72	2 177	6.24	77	84	52 853	27	33.52
1976 ASM	12 406	71	2 152	5.54	82	87	42 634	29	27.74
1975 ASM	11 525	73	2 147	5.03	83	88	40 390	29	25.81
1974 ASM	10 649	75	2 162	4.58	87	91	35 006	30	21.68
1973 ASM	9 876	75	2 236	4.17	84	89	34 653	29	20.74
1972 Census	9 491	74	2 261	4.02	79	86	31 665	30	18.95
INDUSTRY 2045, BLENDED AND PREPARED FLOUR									
1982 Census	19 294	71	1 875	9.00	58	68	89 586	22	67.89
1981 ASM	17 658	71	2 111	7.35	62	72	66 737	26	44.49
1980 ASM	16 309	73	2 000	6.98	61	71	62 420	26	42.85
1979 ASM	15 000	71	2 246	6.09	63	74	50 686	30	31.82
1978 ASM	13 833	70	2 111	6.00	66	77	41 900	33	28.35
1977 Census	12 440	69	2 096	5.62	60	70	48 655	26	33.78
1976 ASM	12 780	68	2 179	5.82	61	70	53 756	24	36.13
1975 ASM	12 061	73	2 100	5.37	61	70	52 646	23	34.26
1974 ASM	10 795	74	2 052	4.92	66	74	45 167	24	29.61
1973 ASM	10 247	74	2 250	4.37	62	72	37 963	27	22.78
1972 Census	9 491	72	2 158	4.33	57	68	38 835	24	24.94

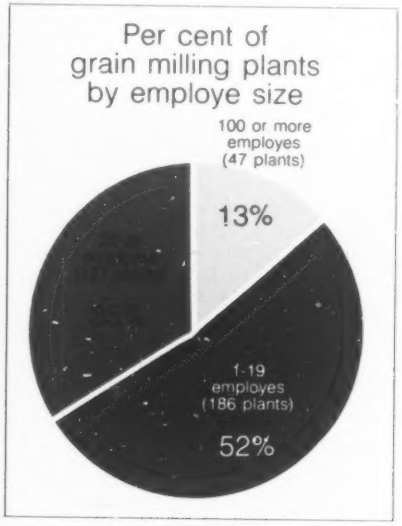
Value of shipments, cost of materials and value added by manufacture, S.I.C. 2041 Flour and Other Grain Mill Products



New York takes lead in wheat flour shipments

CONTINUING SHIFTS IN THE RANKING of states in shipments of the leading category, "wheat flour products, except mixes," are reflected in the 1982 Census of Manufactures for the Flour and Other Grain Mill Products Industry. New York in 1982 replaced Minnesota as the leading state in value of shipments of the principal product category. Minnesota had taken over that spot from Kansas in the 1977 Census tabulations.

New York, which ranked third in 1977 shipments, jumped into first place in 1982 with value of shipments of wheat flour products, except mixes, reaching $326.7 million, up 33% from $246.1 million in 1977. The state ranked third in shipments of "wheat mill products other than flour," which includes millfeed, wheat germ and wheat mill products other than flour, not specified by kind. Value of shipments in this category was $41.5 million, down from $44.7 million in 1977. New York was one of four states that in 1982 countered the long-term downward trend in plant numbers. It had 17 plants in the Flour and Other Grain Mill Products Industry, compared with 15 in 1977.



Minnesota in 1982 ranked second in value of shipments of both wheat flour products, except mixes, ($324.3 million, up 25% from 1977) and of wheat mill products other than flour ($46.7 million, up 5%). Minnesota in 1982 had 23 plants in the Flour and Other Grain Mill Products Industry, one more than in 1977.

Kansas in 1982 was third in value of shipments of wheat flour products, except mixes ($320.2 million, up 23%) and retained its first-place ranking in shipments of wheat mill products other than flour ($50.7 million, down 6% from 1977). Kansas in 1982 had 24 plants, two fewer than in 1977.

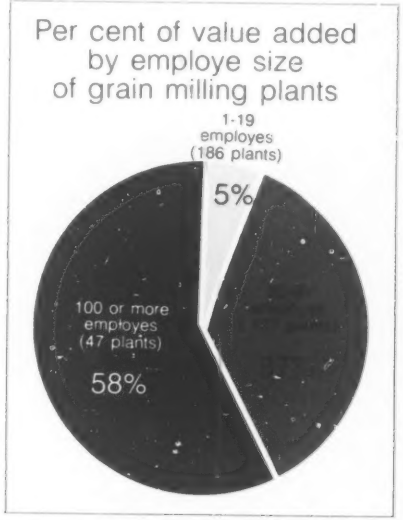
California, with 1982 value of shipments of wheat flour products, except mixes, at $211.4 million, up 59% from 1977, moved into fourth place. It was fifth in wheat products other than flour with value of shipments of $28.2 million. California led all states in plant number gains, with 19 plants in 1982, four more than in 1977.

The Census shows a total of 360 establishments in the Flour and Other Grain Mill Products Industry in 1982, compared with 407 in 1977, 457 in 1972 and 541 in 1967. All of the decrease in plant numbers in the 1977-82 period occurred in establishments with fewer than 20 employes. There were 186 plants in this category in 1982, compared with 234 in 1977. In contrast, there were 127 plants with 20 to 99 employes in 1982, up from 126 in 1977. And the number of plants with 100 or more employes held constant at 47.

Those 47 plants with 100 or more employes, while representing only 13% of total establishments, accounted for 58% of total value added by manufacture in the Flour and Other Grain Mill Products Industry. These plants also accounted for 50% of value of shipments, 48% of the cost of all materials and ingredients purchased and 49% of new capital expenditures.

There were 111 plants in the Blended and Prepared Flour Industry in 1982, down from 137 in both 1977 and 1972.

Of the total, 55 had 20 or more employes. The 24 plants with 100 or more employes, 21% of the total, accounted for 80% of value added by manufacture and 77% of value of shipments.



Flour mill product shipments to record high

SHARP GAINS IN BAKERS' AND INSTITUTIONAL soft wheat flour, in family flour and in white flour for blenders and other processors paced shipments of wheat flour to record levels in 1982, according to the final Census of Manufactures report. Inclusion of figures for major product shipment categories results in an "unofficial" 1982 aggregate for all domestic shipments of wheat flour, except flour mixes, of 274,083,500 cwts. That is up 11,494,900 cwts, or 4%, from the 1977 figure.

The Department of Agriculture on wheat flour supply and utilization placed domestic disappearance of wheat flour in 1982 at 277,704,000 cwts, which was a record until the 1984 disappearance of 278,743,000. (The Census and U.S.D.A.

product category — bakers' and institutional white bread-type flour — totaled 139,934,800 cwts in 1982, off from 145,781,700 cwts in 1977. That 4% decrease is in marked contrast to the previous five-year period, when 1977 ship-

INTENTIONAL
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port for the Flour and Other Grain Mill Products Industry.

While the Bureau of the Census in its report for the Flour and Other Grain Mill Products Industry does not provide an "official" total for shipments of all wheat flour as it has in past years, addi-

total of 262,588,600 cwts, also derived from addition of individual shipment totals. The 1982 shipment aggregate of 274,083,500 cwts compares with the 1972 total of 251,589,000 cwts and the 1967 aggregate of 245,703,000 cwts.

Compilations by the U.S. Depart-

aggregates are not fully comparable in that the Census reflects shipments while the U.S.D.A. numbers are based on production. In addition, the Census includes bulgur while the Agriculture compilations do not.)

Shipmeats of the largest wheat flour

Historical statistics for S.I.C. 2041, 2045

Year[a]	Com-parable[b] (no.)	All establishments[c]		All employers		Production workers			Value added by manufac-ture[d] (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expend-itures (million dollars)	End-of-year inven-tories[e] (million dollars)	Ratios	
		Total (no.)	With 20 employ-ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						Spe-cial-ization (per-cent)	Cover-age (per-cent)
INDUSTRY 2041, FLOUR AND OTHER GRAIN MILL PRODUCTS															
1982 Census	251	360	174	15.1	323.0	11.4	24.2	233.3	1 094.3	3 925.5	4 932.8	90.6	361.3	97	70
1981 ASM	(NA)	(NA)	(NA)	15.8	305.7	11.9	26.1	214.6	1 113.7	4 189.1	5 313.6	67.3	362.3	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	15.5	273.9	11.3	25.6	195.7	1 030.4	3 619.8	4 635.4	53.3	439.6	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	15.3	255.5	11.2	25.2	181.3	942.5	3 291.2	4 218.3	66.4	402.0	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	15.1	241.6	11.1	24.4	168.5	845.3	2 934.3	3 760.9	56.5	303.6	(NA)	(NA)
1977 Census	300	407	173	15.6	222.3	11.3	24.6	153.4	824.5	2 854.2	3 683.3	52.4	263.2	93	71
1976 ASM	(NA)	(NA)	(NA)	17.5	217.1	12.5	26.9	149.0	748.1	3 343.9	4 095.9	53.6	303.3	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	17.7	204.0	12.9	27.7	139.3	714.9	3 569.5	4 327.6	45.8	326.2	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	17.4	195.3	13.0	28.1	128.7	909.1	3 902.1	4 502.2	44.0	361.1	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	17.0	167.9	12.7	28.4	116.5	589.1	2 765.7	3 328.3	29.8	375.7	(NA)	(NA)
1972 Census	340	457	181	16.1	152.6	11.9	26.9	108.1	509.8	1 985.2	2 380.0	30.0	211.3	97	74
1971 ASM	(NA)	(NA)	(NA)	16.0	160.9	13.2	29.2	111.9	529.7	1 920.7	2 451.0	24.8	166.0	(NA)	(NA)
1970 ASM	(NA)	(NA)	(NA)	16.0	161.7	13.7	30.6	109.8	535.1	1 936.1	2 436.3	36.3	166.5	(NA)	(NA)
1969 ASM	(NA)	(NA)	(NA)	20.0	155.9	14.5	32.4	105.4	487.3	1 884.1	2 357.0	31.1	161.1	(NA)	(NA)
1968 ASM	(NA)	(NA)	(NA)	19.9	147.3	14.4	32.4	99.7	466.6	1 866.0	2 363.4	26.1	168.1	(NA)	(NA)
1967 Census	438	541	213	20.5	142.9	14.8	33.2	95.5	491.3	1 865.0	2 457.4	26.3	162.4	93	70
INDUSTRY 2045, BLENDED AND PREPARED FLOUR															
1982 Census	91	111	55	6.8	131.2	4.8	9.0	81.0	609.2	829.3	1 419.1	28.7	114.4	83	50
1981 ASM	(NA)	(NA)	(NA)	7.6	134.2	5.4	11.4	83.8	507.2	933.6	1 347.9	21.4	81.5	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	8.1	132.1	5.9	11.8	82.4	505.6	787.2	1 269.1	24.0	95.0	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	8.6	129.0	6.1	13.7	83.4	435.9	743.2	1 172.4	[d]22.7	91.0	(NA)	(NA)
1978 ASM[f]	(NA)	(NA)	(NA)	9.0	122.7	6.3	13.3	79.8	377.1	721.1	1 097.2	25.5	87.4	(NA)	(NA)
1977 Census	111	137	60	8.4	104.5	5.8	12.1	68.0	408.7	836.3	1 011.7	17.6	80.6	94	60
1976 ASM	(NA)	(NA)	(NA)	8.2	104.8	5.6	12.2	71.0	440.8	674.2	1 105.2	18.3	85.5	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	8.2	98.9	6.0	12.6	67.7	431.7	699.4	1 139.1	19.4	76.6	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	7.8	94.2	5.8	11.9	58.6	352.3	654.8	986.8	13.2	74.6	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	8.1	83.0	6.0	13.5	59.0	307.5	494.0	785.7	14.0	58.0	(NA)	(NA)
1972 Census	115	137	57	7.9	74.9	5.7	12.3	53.2	306.8	461.7	704.6	13.7	47.6	77	65
1971 ASM	(NA)	(NA)	(NA)	8.3	58.5	4.7	9.4	40.9	253.2	330.7	574.0	9.3	36.8	(NA)	(NA)
1970 ASM	(NA)	(NA)	(NA)	7.2	59.4	5.2	10.4	40.3	262.0	319.9	581.6	14.1	36.9	(NA)	(NA)
1969 ASM	(NA)	(NA)	(NA)	7.7	60.7	5.6	11.6	39.3	275.5	335.3	605.6	[d]12.2	44.9	(NA)	(NA)
1968 ASM	(NA)	(NA)	(NA)	7.4	58.1	5.4	11.3	38.3	229.6	322.6	550.3	10.3	39.5	(NA)	(NA)
1967 Census	126	148	66	7.5	56.0	5.5	11.3	35.4	233.1	314.9	547.5	10.5	37.5	76	65

[a] In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete census of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1967, see 1967 Census of Manufactures, vol. II, table 1 of the industry chapter.

[b] For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

[c] Includes establishments with payroll at any time during year.

[d] Effective with the 1982 Economic Censuses, uniform instructions for reporting inventories were introduced for all sector reports. Up to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). In 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Because of this change in reporting instructions, the 1982 data for inventories and value added by manufacture included in the tables of this report are not comparable to the prior-year data shown above and in historical census of manufactures and annual survey of manufactures publications.

ments were up 23% from 118,710,000 in 1972.

Shipments of bakers' and institutional white bread-type flour in 1967 totaled 111,779,000 cwts.

Bulk shipments show gain

While overall shipments of bakers' and institutional white bread-type flour in 1982 were down from 1977, bulk shipments increased. Shipments in bulk cars or trucks in 1982 totaled 120,204,-900 cwts, up 2% from 117,919,700 cwts in 1977 and compared with 87,-116,000 cwts in 1972.

Shipments of bakers' and institutional white bread-type flour in containers, including tote bins, totaled 19,729,900 cwts in 1982, down 29% from 27,862,-000 in 1977 and compared with 31,-594,000 in 1972.

Soft wheat flour up sharply

In contrast to the increase of only 2% in bulk shipments of bakers' and institutional white bread-type flour, bulk shipments of bakers' and institutional soft wheat flour in 1982 were 33% above 1977. All soft wheat flour in 1982 totaled 57,913,800 cwts, up 14,315,800 cwts from 43,598,000 cwts in 1977. As in the case of white flour, shipments of soft wheat flour in containers in 1982 were down from 1977.

Larger share for soft flour

In 1982, white flour represented 71% of total shipments of bakers' and institutional flour (197,848,600) while soft wheat flour accounted for 29% of the total. Those percentages contrast to the 1977 shares of 77% and 23%, but are identical to the percentage shares prevailing in the 1972 Census.

Census of Manufactures reports for the 43 major industries making up the

Food and Kindred Products Industry, Standard Industrial Group 20, details wheat flour usage that accounts for 78% of the total domestic shipments of wheat flour in 1982 by the Flour and Other Grain Mill Products Industry for food use. (This shipment aggregate, of 217,933,100 cwts, includes bakers' and institutional white and soft wheat flour, flour shipped to blenders or other food processors and whole wheat flour. It excludes family flour, durum flour and semolina, bulgur and other wheat flour, including farina.) The remaining 22% was used in industries for which Census reports do not detail flour usage or in industries for which reports are not issued, including pizza operations and retail and supermarket in-store baking.

Major wheat flour users

The following table shows wheat flour usage by major food industries in 1982, with percentages of the total wheat flour shipments by the Flour and Other Grain Mill Products Industry:

Industry, S.I.C. Number	Usage (cwts)	Per cent of total
Bread and Cake, 2051	100,062,000	46
Cookie, Cracker 2052	30,158,000	14
Blended, Prep. Flour 2045	12,163,200	6
Frozen Specialties 2038	8,264,300	4
Grain Mill Products 2041	8,017,500	4
Cereal Breakfast Foods 2043	3,577,300	2
Prepared Feeds 2048	3,380,000	1
Pet Foods 2047	3,110,400	1
Macaroni, Spaghetti 2098	1,619,300	1
Total identified uses	170,352,000	78

In addition to 1,619,300 cwts of wheat flour, the Macaroni and Spaghetti Industry in 1982 used 15,450,100 cwts of semolina and durum flour. The Census report for Flour and Other Grain Mill Products places 1982 shipments of durum flour and semolina at 17,676,500 cwts, down from 18,359,800 cwts in 1977 and compared with 15,670,000 cwts in 1972.

According to the final Census report,

Flour, Other Grain Mill Products shipments

Includes quantity and value of products of this industry produced by (1) establishments classified in the industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included.

1982 product code	Product	1982			1977		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
	FLOUR AND OTHER GRAIN MILL PRODUCTS						
2041-- pt. 2048-- pt.	Total	(568)	(D)	6 863.0	(NA)	(X)	4 982.9
	Made chiefly from flour milled in same establishment	(551)	(D)	4 871.2	(NA)	(X)	3 678.8
	Made chiefly from purchased flour	(545)	(D)	1 991.8	(NA)	(X)	1 304.3
20x11 --	Wheat flour, except flour mixes[3]	(NA)	(D)	3 102.3	(NA)	(X)	2 208.9
	White flour:						
	Shipped for export:						
20x11 05	Commercial baker exports, all white flour types (1,000 cwts (cwt))	13	4 827.3	43.6	15	11 963.5	90.4
20x11 07	All other exports of white flour, such as those under Public Law 480 (D)	9	9 191.2	94.5	7	7 581.1	51.8
	Domestic shipments:						
	Bakers' and institutional white bread-type flour:						
20x11 11	Shipped in bulk cars or trucks (D)	83	120 254.0	1 231.3	28	117 919.7	886.9
20x11 13	Shipped in containers, including tote bins (D)	18	19 739.0	239.6	22	27 862.0	224.3
	Bakers' and institutional soft wheat flour, including commercial bakery, restaurant, hospital, etc.:						
20x11 15	Shipped in bulk cars or trucks (D)	33	52 742.0	498.2	31	36 195.5	230.9
20x11 17	Shipped in containers, including tote bins (D)	13	5 171.0	56.6	23	7 402.2	54.5
	Family white flour:						
	All family flour other than self-rising, such as phosphated, plain, bromated enriched, and all-purpose, including all-purpose purchased by the U.S. Government for domestic donation:						
20x11 21	Shipped in containers of less than 25 lb (D)	21	(D) 980.0	311.7	26	12 180.4	131.2
20x11 23	Shipped in containers of 25 lb. or more (D)	17	5 010.2	48.8	30	7 586.4	62.8
	Self-rising flour:						
20x11 25	Shipped in containers of less than 25 lb (D)	21	4 280.4	78.3	21	5 290.3	62.3
20x11 23	Shipped in containers of 25 lb. or more (D)	6	691.0	6.4	19	1 083.1	10.8
	Flour shipped to blenders or other processors (for further processing and/or packing before resale or shipment):						
20x11 29	For use in food products (mixes, refrigerated doughs, wraps, etc.) (D)	18	17 017.5	183.2	(NA)	11 998.9	98.2
20x11 35	For use in nonfood products (pet food, industrial, etc.) (D)	10	3 514.5	15.7	11	3 754.1	30.8
	Other than white flour:						
20x11 31	Whole wheat (D)	17	2 470.0	27.8	17	2 809.3	24.5
20x11 51	Durum flour and semolina[4] (D)	0	17 674....	192.9	8	18 358.8	145.2
20x11 61	Bulgur (D)	5	5 171.2	48.4	5	6 882.4	50.8
20x11 65	Other wheat flour, including farina (D)	11	1 486.2	19.0	10	3 261.5	24.3
20x11 69	Wheat flour, except flour mixes, n.s.k.	(NA)	(D)	16.3	(NA)	(X)	40.8
20x12 --	Wheat mill products other than flour	(NA)	(D)	478.5	(NA)	(X)	456.4
20x12 13	Wheat mill feed[5] (1,000 s tons)	(x)	3 191.0	458.9	85	4 962.4	433.5
20x12 17	Wheat germ (D)	6	39.0	6.4	16	73.8	18.4
20x12 69	Wheat mill products other than flour, n.s.k.	(NA)	(D)	13.2	(NA)	(X)	3.5
20x15 -- 20x9- --	Flour mixes and refrigerated doughs[6]	(NA)	(D)	2 073.9	(NA)	(X)	1 491.5
20x19 --	Other grain mill products	(NA)	(D)	185.6	(NA)	(X)	98.3
20x19 11	Rye flour[7] (1,000 cwts (cwt))	6	1 484.0	16.6	7	1 709.5	12.0
20x19 23	Other flour (excluding wheat, corn, and rye) (D)	9	3 655.0	44.9	11	3 210.3	29.8
20x19 27	Other mill feed (oats, rye, buckwheat, etc.) (1,000 s tons)	10	613.6	101.7	8	883.2	58.5

Note: In 1982 Census of Manufactures, data for establishments of small single-unit companies with up to 20 employees were estimated from administrative records data rather than data actually collected from respondents. Employment cutoff used for administrative records for each industry and shipments figures are included in code ending with "000". In both 1982 and 1977 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

Corn mill products are excluded.

*Data reported by all producers, not just those with shipments of $100,000 or more.

**For some establishments, data have been estimated from control unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

†Detailed monthly production for flour milling products is published in CIR M26A, Flour Milling Products. The 1982 production for Product Codes 20411, Wheat Flour, is 297,886 1,000 sacks (cwt); 20412 13, Wheat Mill Feed, is 5,363 1,000 short tons; 20416 11, Rye Flour, is 1,447 1,000 sacks (cwt); and 20411 51, Durum Flour and Semolina, is 17,472 1,000 sacks (cwt). These data are not comparable to the data in this report since the census shows shipments, while the CIR shows production.

‡For product detail, see Industry 2045, Blended and Prepared Flour.

1982 shipments of white flour to blenders or other food processors totaled 17,618,600 cwts, up 47% from 11,998,900 cwts in 1977. These usages include mixes, refrigerated doughs and soups. Shipments of white flour for use in non-food products in 1982 amounted to 3,549,500 cwts, down slightly from 3,754,100 cwts in 1977.

Family flour up 18%

Shipments of family flour in 1982, according to the Census report for the Flour and Other Grain Mill Products Industry, totaled 23,380,000 cwts, up 18% from 19,746,800 in 1977 and compared with 19,812,000 in 1972. The totals include all-purpose flour purchased by the federal government for domestic donation.

The report places 1982 shipments of family flour in containers of less than 25 lbs at 20,360,800 cwts, a 67% jump from 12,160,400 cwts in 1977 and also above 13,958,000 cwts in 1972. Shipments of family flour in containers of 25 lbs or more totaled 3,019,200 cwts in 1982, down from 7,586,400 cwts in 1977 and compared with 5,854,000 cwts in 1972.

Shipments of self-rising flour in 1982 aggregated 4,884,000 cwts, down 24% from 6,386,400 cwts in 1977 and also below 5,895,000 cwts in 1972. The 1982 total includes 4,382,400 cwts in containers of less than 25 lbs and only 501,600 cwts in containers of more than 25 lbs, compared with 5,293,300 cwts and 1,093,100 cwts, respectively, in 1977.

Flour for export off

Shipments of white flour for export in 1982 totaled 13,518,500 cwts, down 31% from 19,544,600 cwts in 1977, which in turn was off 11% from 22,053,000 cwts in 1972.

The 1982 export total included 4,327,300 cwts as commercial dollar sales, off 64% from 11,963,500 in 1977. At the same time, all other exports, primarily under the P.L. 480 program, totaled 9,191,200 cwts in 1982, up 21% from 7,581,000 in 1977.

The final Census report places shipments of wheat millfeed in 1982 at 5,061,900 tons, up slightly from 4,952,400 tons in 1977 and compared with 4,249,000 tons in 1972. Shipments of wheat germ continued to fall, with the 1982 total shown as 28,600 tons, down sharply from 73,800 tons in 1977 and 111,000 tons in 1972.

Bread, bread-type rolls pace gains in mixes

SHIPMENTS OF BREAD AND BREAD-type roll mixes and biscuit mixes reached record levels in 1982, according to the final Census of Manufactures report for the Blended and Prepared Flour Industry, S.I.C. 2045.

Shipments of bread and bread-type roll mixes by all establishments — those classified in the Blended and Prepared Flour Industry as well as in other industries — in 1982 were 94% above the 1977 levels. On the strength of that gain, bread and bread-type roll mixes became the second-largest mix category in poundage shipments behind cake mixes, the long-time leader.

Shipments of bread and bread-type roll mixes in 1982 aggregated 5,535,500 cwts, compared with 2,850,000 cwts in 1977 and 4,059,000 cwts in 1972. Thus, the increase in 1982 shipments reversed a downward trend noted in the 1977 Cenus.

Paced by smaller containers

Pacing the 2,685,500-cwt increase in bread and bread-type roll mixes were shipments in containers of less than 5 lbs, which totaled 3,092,600 cwts in 1982, an increase of 248% from 889,400 cwts in 1977. Shipments in containers of 5 lbs or more aggregated 2,442,900 cwts in 1982, against 1,960,600 cwts in 1977.

Mixes in containers of 5 lbs or more are largely for institutional use; those in smaller containers are for consumer use.

Shipments of biscuit mixes in 1982, reflecting the growing popularity of that product in food service as well as at-home meals, totaled 1,779,100 cwts, up 23% from 1,446,100 cwts in 1977. The 333,000-cwt gain in biscuit mix shipments in the 1977-82 period followed an increase of 782,100 cwts, or 118%, in 1977 from the 1972 aggregate, which reversed an earlier downward trend in biscuit mix business. The 1982 aggregate of 1,779,100 also exceeds the previous record of 1,709,000 cwts in 1958.

Contrast in biscuit gains

Most of the gain in biscuit mix shipments in 1982 was in smaller containers, according to the Census report. Shipments in containers of less than 5 lbs totaled 1,045,200 cwts, compared with 725,800 cwts in 1977 and 578,000 cwts in 1972. Shipments in containers of more than 5 lbs totaled 733,900 cwts, up slightly from 720,300 cwts in 1977 and compared with only 86,000 cwts in 1972.

While cake mixes continued as the poundage leader in mix shipments, poundage in 1982 at 8,710,600 cwts was down 8% from 9,511,600 cwts in 1977. Shipments in 1982 still were above the 1972 total of 7,445,000 cwts. But the 801,000-cwt decrease in 1982 was in marked contrast to an increase of 2,066,600 cwts, or 27%, in the 1972-77 inter-Censual period.

Shipments of cake mixes in containers of less than 5 lbs totaled 7,562,800 cwts in 1982, down from 8,256,400 cwts in 1977 and compared with 5,656,000 cwts in 1972. Shipments of cake mixes in containers of 5 lbs or more aggregated 1,147,800 cwts in 1982,

compared with 1,255,200 in 1977 and 1,789,000 cwts in 1972.

Pancake and waffle mixes, the second-ranking mix category in the 1977 Census, slipped to third in total poundage in 1982. Shipments of pancake and waffle mixes in 1982 totaled 4,348,300 cwts, down 24% from 5,696,700 cwts in 1977. The decrease contrasts with an increase of 119% recorded in the 1972-77 period. Pancake and waffle mix shipments in 1972 were 2,600,000 cwts. The decrease in pancake and waffle mix poundage in 1982 was primarily in shipments in containers of 5 lbs or more, which fell 1,120,500 cwts, or 54%, from 1977. Shipments in containers of 5 lbs or less in 1982 decreased 227,900 cwts, or 6%, from 1977.

Shipment figures for other mix categories in the 1982 Census are not fully comparable to 1977 because of changes in product classifications.

The Census report discloses shipment figures for only one refrigerated dough category — "other doughs, including pizza, coffee cake, pancake mix, cookie dough, etc." Shipments totaled 1,291,000 cwts, with no comparison for 1977.

Despite the marked changes in product shipment totals, little variation was observed in shares of value of shipments between 1982 and 1977. Cake mixes again accounted for the largest value of shipments at $604.1 million, which was 29% of the total for the Blended and Prepared Flour Industry. That percentage is unchanged from 1977, when cake mix shipments were valued at $435.3 million.

Even with a 94% increase in poundage, shipments of bread and bread-type roll mixes in 1982 accounted for only 6% of the total value of shipments, or $117 million, compared with a 5% share, or $72.6 million, in 1977. Pan-

Blended, Prepared Flour shipments

Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included.

1982 product code	Product	1982			1977		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
	BLENDED AND PREPARED FLOUR						
20415 — 20450 —	Total	(NA)	(X)	2 673.9	(NA)	(X)	1 491.5
	Made chiefly from flour milled in same establishment	(NA)	(X)	382.1	(NA)	(X)	287.2
	Made chiefly from purchased flour	(NA)	(X)	1 881.8	(NA)	(X)	1 204.3
	Flour mixes:						
	Pancake and waffle mixes:						
20415 51 20450 51	Shipped in containers of less than 5 lb (1,000 sacks (cwt))	(NA)	3 360.4	152.3	16	3 608.3	103.5
20415 52 20450 52	Shipped in containers of 5 lb or more (do.)	(NA)	987.9	23.1	15	2 088.4	28.9
	Cake mixes, including gingerbread:						
20415 53 20450 53	Shipped in containers of less than 5 lb (do.)	(NA)	7 562.8	549.3	15	8 256.4	405.6
20415 54 20450 54	Shipped in containers of 5 lb or more (do.)	(NA)	**1 147.8	54.8	12	1 255.2	29.7
	Biscuit mixes:						
20415 56 20450 56	Shipped in containers of less than 5 lb (do.)	(NA)	1 045.2	27.5	10	725.8	25.7
20415 57 20450 57	Shipped in containers of 5 lb or more (do.)	(NA)	*733.9	27.5	8	720.3	14.9
20415 60 20450 60	Pie crust mixes (do.)	(NA)	(D)	(D)	(NA)	(D)	(D)
20415 63 20450 63	Doughnuts and other sweet yeast goods mixes (do.)	(NA)	4 717.1	150.6	(NA)	(3)	(3)
	Bread and bread-type rolls mixes:						
20415 66 20450 66	Shipped in containers of less than 5 lb (do.)	(NA)	3 082.6	58.5	8	889.4	30.2
20415 67 20450 67	Shipped in containers of 5 lb or more (do.)	(NA)	2 442.9	58.5	17	1 980.6	42.4
	Other prepared flour mixes, including cookie mixes:						
20415 72 20450 72	Shipped in containers of less than 5 lb (do.)	(NA)	*5 325.1	318.1	(NA)	(3)	(3)
20415 74 20450 74	Shipped in containers of 5 lb or more (do.)	(NA)	4 304.1	109.1	(NA)	[4]17 460.0	[4]411.8
	Refrigerated doughs:						
20415 81 20450 81	Biscuit dough (mil lb net wt.)	4	(D)	(D)	3	581.8	155.8
20415 85 20450 85	Bread and bread-type roll dough, including dinner (do.)	5	(D)	(D)	3	95.6	45.7
20415 87 20450 87	Other doughs, including pizza, coffee cake, pancake mix, cookie dough, etc. (do.)	(NA)	129.1	75.8	(NA)	(D)	(D)

Note: In 1982 Census of Manufactures, data for establishments of small single-unit companies with up to 20 employees were estimated from administrative records data rather than data actually collected from respondents. Employment cutoff used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1982 and 1977 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

[1]Data reported by all producers, not just those with shipments of $100,000 or more.

[2]For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

[3]For 1977, data for product codes 20415 63, 20450 63, 20415 72, and 20450 72 were included with product codes 20415 74 and 20450 74.

cake and waffle mix shipments in 1982 were valued at $175.4 million, or 9% of the industry total, the same as in 1977. Value of biscuit mix shipments in 1982 was $55 million, or 3% of the total, also unchanged from 1977.

Cost of all materials reaches $4.3 billion

DELIVERED COST OF ALL MATERIALS, ingredients, containers and supplies used by establishments in the Flour and Other Grain Mill Products Industry and the Blended and Prepared Flour Industry in 1982 aggregated $4,322.3 million, up 33% from $3,258.3 million in 1977. For milling, these costs in 1982 were up 32% from 1977; in Blended and Prepared Flour, total costs in 1982 were up 34% from 1977.

Establishments in the Flour and Other Grain Mill Products Industry in 1982 used 652.2 million bus of wheat, up 8% from 605.2 million bus in 1977. With a delivered cost of $2,655.8 million, or $4.07 per bu, wheat accounted for 74% of the cost of all materials, ingredients, containers and supplies used by S.I.C. 2041 in 1982. Delivered cost of wheat in 1977 was $1,845.1 million, or $3.04 per bu, representing 68% of the total.

Utilization of wheat flour by establishments in the Flour and Other Grain Mill Products Industry in 1982 totaled 8,017,500 cwts, down 16% from 9,588,200 cwts in 1977 but above 7,726,200 cwts in 1972. Blended and Prepared Flour Industry establishments used 12,163,200 cwts of wheat flour in 1982, down 10% from 13,506,900 cwts in 1977 but up from 11,931,200 in 1972. The latter plants also used 2,906,000 cwts of non-wheat flour and prepared flour mixes, up 53% from 1,901,400 cwts in 1977.

Establishments in S.I.C. 2041 used 91,500 tons of sugar (cane and beet) in 1982, up 30% from 70,200 tons in 1977. Usage also increased in S.I.C. 2045. These plants used 255,600 tons of sugar in 1982, up 26% from 203,200 tons in 1977.

Mills consumed 77.4 million lbs of fats and oils for use in flour and prepared flour mixes in 1982, up 38% from 56 million lbs in 1977. Blended and Prepared Flour establishments used 207.1 million lbs of fats and oils in 1982, up 6% from 196.1 million in 1977. Flour and Other Grain Mill Products plants used 60.6 million textile bags (including burlap, cotton and polypropylene) in 1982, up 8% from 1977.

Ingredients, materials consumed

Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry.

1982 material code	Material	1982 Quantity[1]	1982 Delivered cost (million dollars)	1977 Quantity[1]	1977 Delivered cost (million dollars)
	INDUSTRY 2041, FLOUR AND OTHER GRAIN MILL PRODUCTS				
	Materials, ingredients, containers, and supplies	(X)	**3 585.6**	(X)	**2 767.4**
011111	Wheat ... mil bushels	652.2	2 655.8	605.2	1 845.1
011521	Corn ... do	99.2	198.4	83.4	188.5
011931	Oats ... do	(D)	(D)	19.5	32.3
011913	Barley ... do	1.3	3.8	5.3	6.8
011961	Sorghum grain ... do	(D)	(D)	5.4	11.3
204110	Wheat flour ... 1,000 cwt	8 017.5	84.9	9 588.2	89.9
206011	Sugar (cane and beet) in terms of sugar solids ... 1,000 s tons	91.5	44.1	70.2	22.0
207003	Fats and oils for use in flour and prepared flour mixes ... mil lb	77.4	25.5	56.0	16.3
239303	Textile bags (including burlap, cotton, polypropylene, etc.) ... mil bags	**60.6	16.8	56.0	17.2
264338	Paper shipping sacks ... 1,000 s tons	(S)	39.2	(*)	45.6
265001	Paperboard boxes and containers	(X)	27.0	(X)	8.0
970099	All other materials and components, parts, containers, and supplies	(X)	286.9	(X)	168.5
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	(X)	151.2	(X)	275.9
	INDUSTRY 2045, BLENDED AND PREPARED FLOUR				
	Materials, ingredients, containers, and supplies	(X)	**738.7**	(X)	**550.9**
204001	Flour (other than wheat) and prepared flour mixes ... 1,000 cwt	2 906.0	37.3	1 901.4	23.1
011111	Wheat ... mil bushels	-	-	(NA)	(*)
204110	Wheat flour ... 1,000 cwt	12 163.2	132.7	13 506.9	106.9
206011	Sugar (cane and beet) ... 1,000 s tons	255.6	115.2	203.2	65.9
207003	Fats and oils for use in flour and prepared flour mixes ... mil lb	207.1	64.7	196.1	50.5
190003	Flexible packaging materials	(X)	15.5	(X)	(*)
265001	Paperboard containers, boxes, and corrugated paperboard	(X)	97.2	(X)	[4]60.0
970099	All other materials and components, parts, containers, and supplies	(X)	210.8	(X)	[4]142.5
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	(X)	63.2	(X)	82.0

[1]For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

[2]Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

[3]For 1977, unit of measure for material code 264338 was thousand sacks.

[4]For 1977, data for material code 011111 were included with data for material code 970099.

[5]For 1977, material codes 190003 and 265001 were collected and reported as material code 970015, Paper containers and converted flexible packaging materials (including drums, fiber cans, cartons, liner materials, etc.).